

## RECORD OF COMMUNICATION

TO: Grisell Diaz-Cotto

FROM: Adly Michael / Robert Toth

SUBJECT: QUALITY ASSURED DATA

Diamond Head Oil SF, CLP case #38606, SDG MB4TT7; MB4TY9; MB4TX9,  
37 water samples were analyzed for Metals (MA# 1772.0).

REPLY BY: 8/21/2009

**PLEASE SIGN BELOW IN ACKNOWLEDGEMENT OF RECEIPT OF THE FOLLOWING VALIDATED  
DATA AND RETURN A COPY OF THIS RECORD OF COMMUNICATION TO THE RSCC-REGION II, BY  
INTER-OFFICE MAIL AT EDISON MS-215, OR FAX AT 732-321-6622**

COMMENTS:

SIGNATURE: 

DATE: 8/18/09

DATE RECEIVED BY EPA-RSCC: \_\_\_\_\_

300382



# RECORD OF COMMUNICATION

REGIONAL SAMPLE CONTROL CENTER

ROC #3

DATE: 7/16/2009  
SUBJECT: CLP Data Package for Quality Assurance Review  
FROM: Hazardous Waste Support Section (HWSS)/RSCC  
TO: HWSS ESAT-TOPO

TDF# 09-0829

*Attached is the following INORGANIC Data Package to be reviewed for Quality Assurance*

SITE: Diamond Head Oil CASE #: 38606

SDG#: MB4TT7, MB4TY9, MB4TX9 SAMPLER: CH2M

PROJ. CODE: CO SITE SPILL #: KK #SAMPLES MATRIX

LAB: A4 OPERABLE UNIT: 00 37 Water

TURN-AROUND-TIME: 21 day \_\_\_\_\_

CERCLIS ID #: NJD0922226000 FRACTION: Metals (MA# 1772.0)

Contaminant(s) of Concern (If known)

## REGION II RSCC DATA TRANSFER LOG

Relinquished By

Received By

<u>Signature</u>	<u>Date/Time</u>	<u>Signature</u>	<u>Date/Time</u>
<u>Ralind [Signature]</u>	<u>7/21/09 9:45 am</u>	<u>C. Stame</u>	<u>7/21/09 9:45 am</u>
<u>C. Stame</u>	<u>8/12/09 1:30 pm</u>	<u>Hani Sheik</u>	<u>8/12/09 2:30 PM</u>
<u>Hani Sheik</u>	<u>8/12/09 2:55 PM</u>	<u>Ralind [Signature]</u>	<u>8/12/09 2:55 PM</u>
<u>Ralind [Signature]</u>	<u>8/12/09 3:00 PM</u>	<u>R. J. Shelley</u>	<u>8/12/09 3:00 PM</u>
<u>R. J. Shelley</u>	<u>8/12/09 3:45</u>	<u>Ralind [Signature]</u>	<u>8/12/09 3:45 PM</u>

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TT7

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7  
 Matrix (soil/water): WATER Lab Sample ID: 0010369-01  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	6.0		N	P
7440-39-3	Barium	76.2	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	9.1		N	P
7440-48-4	Cobalt	11.7	J	N	P
7440-50-8	Copper	16.9		N	P
7439-92-1	Lead	7.8		N	P
7439-96-5	Manganese	2110		NE	J P
7440-02-0	Nickel	162		N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	356		N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

0000000016

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TT8

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7  
 Matrix (soil/water): WATER Lab Sample ID: 0010369-02  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	121		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	5.1		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	23.9		N	P
7439-92-1	Lead	4.4	J	N	P
7439-96-5	Manganese	969		NE	P
7440-02-0	Nickel	10.9	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	14.0	J	N	P
7440-66-6	Zinc	25.5	J	N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

0000000017

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TT9

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7  
 Matrix (soil/water): WATER Lab Sample ID: 0010369-03  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	112		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	3.3	J	N	P
7440-48-4	Cobalt	8.8	J	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	3.7	J	N	P
7439-96-5	Manganese	808		NE	P
7440-02-0	Nickel	9.5	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	105		N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

0000000018

**USEPA-CLP**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

**MB4TW0**

*FB*

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7  
 Matrix (soil/water): WATER Lab Sample ID: 0010369-04  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	100	U	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	5.0	U	N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	5.0	U	N	P
7439-96-5	Manganese	7.5	U	NE	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	30.0	U	N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

0000000019

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TW2

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7

Matrix (soil/water): WATER Lab Sample ID: 0010369-05

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	79.1	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	77.1		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	11.8	J	N	P
7439-92-1	Lead	77.7		N	P
7439-96-5	Manganese	103		NE	P
7440-02-0	Nickel	22.3		N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	32.5		N	P
7440-66-6	Zinc	43.2		N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000020

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TW3

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7  
 Matrix (soil/water): WATER Lab Sample ID: 0010369-06  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	78.5	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	<del>21.6</del>		N R	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	8.0	J	N	P
7439-92-1	Lead	<del>17.2</del>		N R	P
7439-96-5	Manganese	90.6		NE J	P
7440-02-0	Nickel	8.7	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	19.6	J	N	P
7440-66-6	Zinc	15.3	J	N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

0000000021



## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TW4

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7

Matrix (soil/water): WATER Lab Sample ID: 0010369-07

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	11.5		N	P
7440-39-3	Barium	161		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	22.1		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	28.6		N	P
7439-92-1	Lead	26.1		N	P
7439-96-5	Manganese	594		NE	P
7440-02-0	Nickel	17.2	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	10.5	J	N	P
7440-66-6	Zinc	74.0		N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_

Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000022

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TW7

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7

Matrix (soil/water): WATER Lab Sample ID: 0010396-05

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	<del>9.3</del> 30.0	<del>U</del>	N	P
7440-38-2	Arsenic	5.2		N	P
7440-39-3	Barium	54.5	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	107		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	7.8	J	N	P
7439-92-1	Lead	42.5		N	P
7439-96-5	Manganese	7.8		NE	P
7440-02-0	Nickel	17.0	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	183		N	P
7440-66-6	Zinc	30.0	U	N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_

Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000023

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TW8

Lab Name: A4 Scientific, Inc.Contract: EPW08063Lab Code: A4 Case No.: 38606NRAS No.: 1772.0SDG NO.: MB4TT7Matrix (soil/water): WATERLab Sample ID: 0010396-06Level (low/med): LOWDate Received: 06/25/2009% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	152		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	4.4	J	N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	10.5	J	N	P
7439-92-1	Lead	4.7	J	N	P
7439-96-5	Manganese	728		NE	P
7440-02-0	Nickel	10.5	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	101		N	P

Color Before: COLORLESSClarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESSClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000024

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TW9

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7  
 Matrix (soil/water): WATER Lab Sample ID: 0010396-07  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	2.3	J	N	P
7440-39-3	Barium	349		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	13.2		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	5.0		N	P
7439-96-5	Manganese	215		NE J	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	46.0		N	P
7440-66-6	Zinc	17.0	J	N	P

Color Before: YELLOW Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

0000000025

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TX0

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG No.: MB4TT7  
 Matrix (soil/water): WATER Lab Sample ID: 0010396-08  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	17.0		N	P
7440-39-3	Barium	33.4	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	22.7		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	5.0	U	N	P
7439-96-5	Manganese	139		NE	P
7440-02-0	Nickel	126		N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	253		N	P
7440-66-6	Zinc	30.0	U	N	P

Color Before: YELLOW Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

0000000025

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TX1

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7

Matrix (soil/water): WATER Lab Sample ID: 0010396-09

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	153		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	7.8		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	4.6	J	N	P
7439-92-1	Lead	5.3		N	P
7439-96-5	Manganese	338		NE J	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	13.3	J	N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000027

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TX2

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7

Matrix (soil/water): WATER Lab Sample ID: 0010396-10

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	41.7	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	13.3		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	5.0	U	N	P
7439-96-5	Manganese	159		NE	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	34.0		N	P
7440-66-6	Zinc	30.0	U	N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_

Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000028

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TX3

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7  
Matrix (soil/water): WATER Lab Sample ID: 0010396-11  
Level (low/med): LOW Date Received: 06/25/2009  
% Solids: 0.0  
Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	110		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	3.4	J	N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	24.1		N	P
7439-92-1	Lead	9.4		N	P
7439-96-5	Manganese	456		NE	P
7440-02-0	Nickel	9.4	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	28.9	J	N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

0000000029



**USEPA-CLP**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

**MB4TX4**

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7  
 Matrix (soil/water): WATER Lab Sample ID: 0010396-01  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	59.8	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	17.7		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	5.0	U	N	P
7439-96-5	Manganese	930		NE J	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	34.8		N	P
7440-66-6	Zinc	18.4	J	N	P

Color Before: YELLOW Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

**000000030**

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TX5

Lab Name: A4 Scientific, Inc.Contract: EPW08063Lab Code: A4 Case No.: 38606NRAS No.: 1772.0SDG NO.: MB4TT7Matrix (soil/water): WATERLab Sample ID: 0010396-02Level (low/med): LOWDate Received: 06/25/2009% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	90.8	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	3.6	J	N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	13.7		N	P
7439-92-1	Lead	10.5		N	P
7439-96-5	Manganese	730		NE J	P
7440-02-0	Nickel	7.3	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	49.3		N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

0000000031

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TX6

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7

Matrix (soil/water): WATER Lab Sample ID: 0010396-03

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	2.0	J	N	P
7440-39-3	Barium	86.5	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	14.9		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	5.4	J	N	P
7439-92-1	Lead	5.3		N	P
7439-96-5	Manganese	613		NE	P
7440-02-0	Nickel	8.0	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	12.8	J	N	P
7440-66-6	Zinc	30.0	U	N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000032

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TX7

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TT7  
 Matrix (soil/water): WATER Lab Sample ID: 0010396-04  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	118		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	21.9		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	5.0	U	N	P
7439-96-5	Manganese	121		NE	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	123		N	P
7440-66-6	Zinc	30.0	U	N	P

Color Before: YELLOW Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

000000033

<b>Contract #:</b> EPW06057	<b>Case #:</b> 38606	<b>SDG #:</b> MB4TT7	<b>HAZ. WASTE SUPPORT SEC.</b>
-----------------------------	----------------------	----------------------	--------------------------------

### **SDG NARRATIVE**

#### **SAMPLE RECIEPT & LOGIN**

The following samples were received on the dates listed against them. The samples were logged in for analysis as listed.

<u><b>Client Sample</b></u>	<u><b>Lab Sample</b></u>	<u><b>Matrix</b></u>	<u><b>#Cont.</b></u>	<u><b>Received</b></u>	<u><b>Analysis</b></u>	<u><b>Comments</b></u>
MB4TT7	0010369-01	Water	1	06/25/09 10:03	ILM05.4-TOTAL ICPAES	SDG FIRST SX-MA 1772.0
MB4TT8	0010369-02	Water	1	06/25/09 10:03	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TT9	0010369-03	Water	1	06/25/09 10:03	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TW0	0010369-04	Water	1	06/25/09 10:03	ILM05.4-TOTAL ICPAES	FIELD QCMA 1772.0
MB4TW2	0010369-05	Water	1	06/25/09 10:03	ILM05.4-TOTAL ICPAES	FIELD QCMA 1772.0
MB4TW3	0010369-06	Water	1	06/25/09 10:03	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TW4	0010369-07	Water	1	06/25/09 10:03	ILM05.4-TOTAL ICPAES	MS/DUP-SDG FINAL SX-MA 1772.0
MB4TX4	0010396-01	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TX5	0010396-02	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TX6	0010396-03	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TX7	0010396-04	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TW7	0010396-05	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TW8	0010396-06	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TW9	0010396-07	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TX0	0010396-08	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TX1	0010396-09	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TX2	0010396-10	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TX3	0010396-11	Water	2	06/25/09 09:56	ILM05.4-TOTAL ICPAES	MA 1772.0

Samples were received in the following coolers.

<b>DATE RECEIVED</b>	<b>COOLER NO.</b>	<b>Temp (in °C)</b>	<b>AIRBILL NO.</b>
5/30/09	1	5	879657814676
6/4/09	1	3	869657614481
6/4/09	2	4	869657614390

No other discrepancies or issues were noted during receipt and login.

000000002

# A4 SCIENTIFIC, INC.

1544 Sawdust Road, Suite 505 • The Woodlands, TX 77380 • Phone (281) 292-5277

Contract #: EPW06057

Case #: 38606

SDG #: MB4TT7

## SDG NARRATIVE

### ICP-AES

All samples were analyzed under MA 1772.0 (ICP-AES Analysis with a 2x Concentrated Preparation).

Water samples were digested by Hot-Block technique (HW1) and analyzed using a Thermo Electron ICAP6500.

DUP and MS were performed on sample "MB4TW4" they were within the QC limits.

The Serial Dilution was performed on sample "MB4TW4" and they were within the QC limits.

No problems were encountered during sample preparation or analysis.

All samples were prepared and analyzed within the contractual holding times.

pH of the water samples was verified upon sample receipt and is listed below:

EPA SAMPLE #	LAB SAMPLE #	pH- AES, Hg
MB4TX4	0010396-01	<2
MB4TX5	0010396-02	<2
MB4TX6	0010396-03	<2
MB4TX7	0010396-04	<2
MB4TW7	0010396-05	<2
MB4TW8	0010396-06	<2
MB4TW9	0010396-07	<2
MB4TX0	0010396-08	<2
MB4TX1	0010396-09	<2
MB4TX2	0010396-10	<2
MB4TX3	0010396-11	<2
MB4TT7	0010369-01	<2
MB4TT8	0010369-02	<2
MB4TT9	0010369-03	<2
MB4TW0	0010369-04	<2
MB4TW2	0010369-05	<2
MB4TW3	0010369-06	<2
MB4TW4	0010369-07	<2

### ICP-AES

#### Water Samples:

$$\text{Concentration } (\mu\text{g/L}) = C * \frac{V_f}{V_i} * DF$$

Where,

C = Instrument value in  $\mu\text{g/L}$

$V_f$  = Final digestion volume (mL) (50ml)

$V_i$  = Initial digestion volume (mL) (50ml)

DF = Dilution Factor

000000003

RECEIVED

JUL 14 2009

HAZ. WASTE SUPPORT SEC.

SAMPLE DELIVERY GROUP (SDG)  
COVER SHEETSDG Number: MB4TT7-Revised☐ ICP-AES Analysis☒ ICP-MS AnalysisLaboratory Name: A4 SCIENTIFIC, INC.Laboratory Code: A4Contract No.: EPW08063Case No.: 38606

Analysis Price: \_\_\_\_\_

SDG Turnaround: 21 daysModified Analysis (if applicable):Modification Reference No.: 1772.0

## EPA Sample Numbers in SDG (Listed in Numerical Order)

1) MB4TT7	7) MB4TW4	13) MB4TX2	19)
2) MB4TT8	8) MB4TW7	14) MB4TX3	20)
3) MB4TT9	9) MB4TW8	15) MB4TX4	21)
4) MB4TW0	10) MB4TW9	16) MB4TX5	22)
5) MB4TW2	11) MB4TX0	17) MB4TX6	23)
6) MB4TW3	12) MB4TX1	18) MB4TX7	24)

MB4TT7

First Sample in SDG

MB4TX7

Last Sample in SDG

05/30/2009

First Sample Receipt Date

06/04/2009

Last Sample Receipt Date

Note: There are a maximum of 20 **field** samples [excluding Performance Evaluation (PE) Samples] in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

  
Signature6/24/09  
Date000000011  
Inorganic (10/06)

**jschulze@a4scientific.com**

---

**From:** "Von Moll, Kristin" <kvonmoll@fedcsc.com>  
**To:** "Jessica Schulze" <jschulze@a4scientific.com>; "Laxmi Teerupalli" <laxmi@a4scientific.com>; "Rabina Shreshta" <rabina@a4scientific.com>; "Reddy Pakanati" <pakanati@a4scientific.com>; "Shreedhar Vokati" <shreedhar@a4scientific.com>  
**Cc:** "Adly Michael" <Michael.Adly@epamail.epa.gov>; "Jennifer Feranda" <feranda.jennifer@epa.gov>  
**Sent:** Thursday, June 25, 2009 2:46 PM  
**Attach:** 20090602154452006.pdf; 20090602154431891.pdf; Region 02 \_ Case 38606 \_ Lab A4 \_ Issue Laboratory problems \_ FINAL.eml  
**Subject:** Region 02 | Case 38606 | Lab A4 | Issue Discrepancies with tags, jars, and/or TR/COC | FINAL

Jessica,

-Record of Communication Update-

This ROC has been updated for the resolution regarding the analysis.

\*\*\*Summary Start\*\*\*

**Issue:** The analysis is listed on the TR/COC as ICP/MS for the soil and the water samples; however, per scheduling the analysis should be ICP-AES (Al, Ca, Fe, Mg, K, Na), Hg and ICP-MS TM for the water samples and ICP-AES TM and Hg for the soil samples.

**Resolution:** Per Region 2, the laboratory should follow scheduling for the soil samples and should analyze the water samples for ICP-AES (Al, Ca, Fe, Mg, K, Na), Hg and ICP-AES analysis for the 16 analytes by MA 1772.0. The issue should be noted in the SDG Narrative.

\*\*\*Summary End\*\*\*

Please see other ROC sent on 6/25 (attached) for complete email trail regarding the analysis by MA 1772.0.

Please let me know if you have any question.

Thanks,

Kristin E. Von Moll  
 Environmental Coordinator - Regions 2 & 7  
 CSC

15000 Conference Center Drive, Chantilly, VA 20151  
 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 | [kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

---

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

---

**Issue:** Several samples have an odor of Hydrogen sulfide. The laboratory is having problems analyzing the ICP-MS water samples due to the Sulphur interference resulting in QC failure for Ag and Pb; therefore, the laboratory is suggesting ICP-AES analysis on all water samples for this Case. The samples are scheduled for ICP-AES (Al, Ca, Mg, Na, Fe and K), Hg and ICP-MS TM.

**Resolution:** Per Region 2, the laboratory should analyze these samples by MA 1772.0 for ICP-AES analysis for the 16 analytes and the issue should be noted in the SDG Narrative. The start date for this analysis will be 6/25.

6/25/2009 3:20 PM Phone conversation between Adly Michael, Region 2, and Kristin Von Moll, SMO. Kristin told Adly that A4 was awarded the MA that is being used to analyze samples for Case 38606 and confirmed

6/23/09  
 7/12/09



that the lab should proceed with the analysis of the water samples by MA 1772.0.

-----Original Message-----

From: Von Moll, Kristin

Sent: Tuesday, June 02, 2009 4:44 PM

To: 'Jessica Schulze'; 'Laxmi Teerupalli'; 'Rabina Shreshta'; 'Reddy Pakanati'; 'Shreedhar Vokati'

Cc: 'Adly Michael'; 'Jennifer Ferranda'

Subject: Region 02 | Case 38606 | Lab A4 | Issue Discrepancies with tags, jars, and/or TR/COC | FINAL

Jessica,

\*\*\*Summary Start\*\*\*

Issue: The analysis is listed on the TR/COC as ICP/MS for the soil and the water samples; however, per scheduling the analysis should be ICP-AES (Al, Ca, Fe, Mg, K, Na), Hg and ICP-MS TM for the water samples and ICP-AES TM and Hg for the soil samples.

Resolution: Per Region 2, the laboratory should follow scheduling and note the issue in the SDG Narrative.

\*\*\*Summary End\*\*\*

Please let me know if you have any question.

Thanks,

Kristin E. Von Moll

Environmental Coordinator - Regions 2 & 7 CSC

15000 Conference Center Drive, Chantilly, VA 20151 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 | [kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

-----  
This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.  
-----

-----Original Message-----

From: [Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov) [mailto:[Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov)]

Sent: Tuesday, June 02, 2009 4:41 PM

To: Von Moll, Kristin

Cc: [feranda.jennifer@epa.gov](mailto:feranda.jennifer@epa.gov)

Subject: Re: NEW ISSUE #10 | Case 38606 | Lab A4 | Issue Discrepancies with tags, jars, and/or TR/COC

Kristin,

The lab should follow the scheduling notification for the analysis of soil and water samples. However, for aqueous samples, Hg is scheduled with ICP-AES (Al, Ca, Fe, Mg, K, and Na)

Thanks.

Adly A. Michael

US EPA - Region 2

HWSB - HWSS

Phone: (732) 906-6161

00000232  
11/1-138  
7/12/2000

Fax: (732) 321-6622

"Von Moll,  
Kristin"

<[kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com)>

To

Adly [Michael/R2/USEPA/US@EPA](mailto:Michael/R2/USEPA/US@EPA),  
Jennifer [Feranda/R2/USEPA/US@EPA](mailto:Feranda/R2/USEPA/US@EPA)

06/02/2009 04:30

cc

PM

Subject

NEW ISSUE #10 | Case 38606 | Lab  
A4 | Issue Discrepancies with  
tags, jars, and/or TR/COC

Adly,

The following issue was noticed at SMO.

Issue: The analysis is listed on the TR/COC as ICP/MS for the soil and the water samples; however, per scheduling the analysis should be ICP-AES (Al, Ca, Fe, Mg, K, Na), ICP-MS TM and Hg for the water samples and ICP-AES TM for the soil samples.

Please confirm that all metals are required on the water samples and that the soil samples require only AES and Hg analysis.

Thanks,

Kristin E. Von Moll  
Environmental Coordinator - Regions 2 & 7 CSC

15000 Conference Center Drive, Chantilly, VA 20151 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 |  
[kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

-----  
This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.  
-----

From: [jschulze@a4scientific.com](mailto:jschulze@a4scientific.com) [mailto:[jschulze@a4scientific.com](mailto:jschulze@a4scientific.com)]  
Sent: Tuesday, June 02, 2009 4:44 PM  
To: Von Moll, Kristin  
Subject: CASRE 38606

Kristin,

Please see attached for case 38606.

Please let me know if you have any questions.

060606 233  
11/1-13-09  
7/13/2009

Thanks.

Jessica Schulze

A4 Scientific Inc.

1544 Sawdust Rd. Suite 505

The Woodlands, Texas 77380

(281) 292-5277(See attached file: 20090602154452006.pdf)(See attached

file: 20090602154431891.pdf)

0808274  
5/7-13-5  
7/12/2008

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TY8

Lab Name: A4 Scientific, Inc.Contract: EPW08063Lab Code: A4 Case No.: 38606NRAS No.: 1772.0SDG NO.: MB4TY9Matrix (soil/water): WATERLab Sample ID: 0010526-01Level (low/med): LOWDate Received: 06/25/2009Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	132		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	23.3		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	5.0	U	N	P
7439-96-5	Manganese	126		N	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	120		N	P
7440-66-6	Zinc	22.3	J	N	P

Color Before: YELLOWClarity Before: CLOUDY

Texture: \_\_\_\_\_

Color After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000011

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TY9

Lab Name: A4 Scientific, Inc.Contract: EPW08063Lab Code: A4 Case No.: 38606NRAS No.: 1772.0SDG NO.: MB4TY9Matrix (soil/water): WATERLab Sample ID: 0010526-02Level (low/med): LOWDate Received: 06/25/2009% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U	N	P
7440-39-3	Barium	73.7	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	8.6		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	21.0		N	P
7439-92-1	Lead	5.0	U	N	P
7439-96-5	Manganese	11.0		N	P
7440-02-0	Nickel	9.5	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	18.6	J	N	P
7440-66-6	Zinc	16.4	J	N	P

Color Before: COLORLESSClarity Before: CLOUDY

Texture: \_\_\_\_\_

Color After: COLORLESSClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000012

RECEIVED

## A4 SCIENTIFIC, INC.

1544 Sawdust Road, Suite 505 • The Woodlands, TX 77380 • Phone (281) 292-5244

JUL 14 2009

Contract #: EPW06057	Case #: 38606	SDG #: MB4TY9
----------------------	---------------	---------------

HAZ. WASTE SUPPORT SEC.

T 2:13-09

SDG NARRATIVESAMPLE RECIEPT & LOGIN

The following samples were received on the dates listed against them. The samples were logged in for analysis as listed.

<u>Client Sample</u>	<u>Lab Sample</u>	<u>Matrix</u>	<u>#Cont.</u>	<u>Received</u>	<u>Analysis</u>	<u>Comments</u>
MB4TY8	0010526-01	Water	1	06/25/09 09:36	ILM05.4-DISSOLVED ICPAES	SDG FIRST SX- MS/DUP-(Filtered) ICP Metals -MA 1772
MB4TY9	0010526-02	Water	1	06/25/09 09:36	ILM05.4-TOTAL ICPAES	SDG FINAL SX- (Filtered) ICP Metals - MA 1772.0

Samples were received in the following coolers.

<u>DATE RECEIVED</u>	<u>COOLER NO.</u>	<u>Temp (in °C)</u>	<u>AIRBILL NO.</u>
6/11/09	1	6	869328646405

No other discrepancies or issues were noted during receipt and login.

ICP-AES

All samples were analyzed under MA 1772.0 (ICP-AES Analysis with a 2x Concentrated Preparation).

Water samples were digested by Hot-Block technique (HW1) and analyzed using a Thermo Electron ICAP6500.

DUP and MS were performed on sample "MB4TY9" they were within the QC limits.

The Serial Dilution was performed on sample "MB4TY9" and they were within the QC limits.

No problems were encountered during sample preparation or analysis.

All samples were prepared and analyzed within the contractual holding times.

pH of the water samples was verified upon sample receipt and is listed below:

<u>EPA SAMPLE #</u>	<u>LAB SAMPLE #</u>	<u>pH- AES, Hg</u>
MB4TY9	0010526-01	<2
MB4TY9	0010526-02	<2

ICP-AESWater Samples:

$$\text{Concentration } (\mu\text{g/L}) = C * \frac{V_f}{V_i} * DF$$

0000000002

# A4 SCIENTIFIC, INC.

1544 Sawdust Road, Suite 505 • The Woodlands, TX 77380 • Phone (281) 292-5277

Contract #: EPW06057	Case #: 38606	SDG #: MB4Y9
----------------------	---------------	--------------

12.13.09

## SDG NARRATIVE

Where,

C = Instrument value in  $\mu\text{g/L}$

$V_f$  = Final digestion volume (mL) (50ml)

$V_i$  = Initial digestion volume (mL) (50ml)

DF = Dilution Factor

000000003

RECEIVED

JUL 14 2009

SAMPLE DELIVERY GROUP (SDG)  
COVER SHEET

HAZ. WASTE SUPPORT SEC.

SDG Number: MB4TY9

☐ ICP-AES Analysis☒ ICP-MS Analysis

Laboratory Name: A4 SCIENTIFIC, INC.

Laboratory Code: A4

Contract No.: EPW08063

Case No.: 38606

Analysis Price:

SDG Turnaround: 21 days

Modified Analysis (if applicable):

Modification Reference No.: 1772-D

## EPA Sample Numbers in SDG (Listed in Numerical Order)

1) MB4TY8	7)	13)	19)
2) MB4TY9	8)	14)	20)
3)	9)	15)	21)
4)	10)	16)	22)
5)	11)	17)	23)
6)	12)	18)	24)

MB4TY8

First Sample in SDG

06/11/2009

First Sample Receipt Date

MB4TY9

Last Sample in SDG

06/11/2009

Last Sample Receipt Date

Note: There are a maximum of 20 field samples [excluding Performance Evaluation (PE) Samples] in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature

Date

4/26/09

0000000009

Inorganic (10/06)



**jschulze@a4scientific.com**

---

**From:** "Von Moll, Kristin" <kvonmoll@fedcsc.com>  
**To:** "Jessica Schulze" <jschulze@a4scientific.com>; "Laxmi Teerupalli" <laxmi@a4scientific.com>; "Rabina Shreshta" <rabina@a4scientific.com>; "Reddy Pakanati" <pakanati@a4scientific.com>; "Shreedhar Vokati" <shreedhar@a4scientific.com>  
**Cc:** "Adly Michael" <Michael.Adly@epamail.epa.gov>; "Jennifer Ferranda" <feranda.jennifer@epa.gov>  
**Sent:** Friday, June 12, 2009 8:30 AM  
**Attach:** 38606.pdf  
**Subject:** Region 02 | Case 38606 | Lab A4 | Issue Discrepancies with tags, jars, and/or TR/COC | FINAL

Jessica,

\*\*\*Summary Start\*\*\*

Issue: There are DM samples listed on the TR/COC for dissolved metals analysis; however, there are no dissolved metals samples scheduled for this Case.

Resolution: Per Region 2, the two dissolved metals samples will be scheduled and the issue should be noted in the SDG Narrative. The samples require filtered analysis by ICP-AES (Al, Ca, Fe, Mg, K, Na), Hg and ICP-MS TM.

\*\*\*Summary End\*\*\*

Please let me know if you have any questions.

Thanks,

Kristin E. Von Moll  
 Environmental Coordinator - Regions 2 & 7  
 CSC

15000 Conference Center Drive, Chantilly, VA 20151  
 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 | [kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

---

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

---

-----Original Message-----

**From:** [Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov) [mailto:[Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov)]  
**Sent:** Friday, June 12, 2009 9:50 AM  
**To:** Von Moll, Kristin  
**Cc:** [feranda.jennifer@epa.gov](mailto:feranda.jennifer@epa.gov)  
**Subject:** Re: NEW ISSUE #29 | Case 38606 | Lab A4 | Issue Discrepancies with tags, jars, and/or TR/COC

Kristin,

The additional samples for dissolved Metals are only two samples. If those two samples have been received, that is it, no more. those two samples should be analyzed similar to the others for TM, i.e. by ICP-AES for select Metals and Hg, and by ICP-MS for the whole list of 16 analytes/Metals.

If you have any further questions, please e-mail or call.

000143  
 6/15/09  
 6/15/09

Thanks for your help with this issue.

Adly A. Michael  
US EPA - Region 2  
HWSB - HWSS  
Phone: (732) 906-6161  
Fax: (732) 321-6622

"Von Moll,  
Kristin"

<[kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com)>

To

Adly [Michael/R2/USEPA/US@EPA](mailto:Michael/R2/USEPA/US@EPA),  
Jennifer [Feranda/R2/USEPA/US@EPA](mailto:Feranda/R2/USEPA/US@EPA)

06/12/2009 09:23

cc

AM

Subject

NEW ISSUE #29 | Case 38606 | Lab  
A4 | Issue Discrepancies with  
tags, jars, and/or TR/COC

Adly,

Can you please clarify, are you saying that two additional dissolved metals samples are expected to ship on top of the two that have already shipped? Can you also please confirm the analysis for these dissolved metals? The total metals are scheduled for the AES select metals and Hg as well as MS total metals.

Please let me know if you have any questions.

Thanks,

Kristin E. Von Moll  
Environmental Coordinator - Regions 2 & 7 CSC

15000 Conference Center Drive, Chantilly, VA 20151 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 |  
[kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

---

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

---

-----Original Message-----

06144  
11/13/09  
6/15/2009

From: [Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov) [mailto:[Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov)]

Sent: Friday, June 12, 2009 9:18 AM

To: Von Moll, Kristin

Cc: [feranda.jennifer@epa.gov](mailto:feranda.jennifer@epa.gov)

Subject: Re: NEW ISSUE #29 | Case 38606 | Lab A4 | Issue Discrepancies with tags, jars, and/or TR/COC

Kristin,

Please advise the lab of two (2) additional water samples for Dissolved Metals analysis. Also, samples will be shipped today for Saturday (tomorrow) delivery, and with that shipment the case will be complete.

Thanks.

Adly A. Michael  
US EPA - Region 2  
HWSB - HWSS  
Phone: (732) 906-6161  
Fax: (732) 321-6622

"Von Moll,  
Kristin"

<[kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com)>

To

Adly [Michael/R2/USEPA/US@EPA](mailto:Michael/R2/USEPA/US@EPA),  
Jennifer [Feranda/R2/USEPA/US@EPA](mailto:Feranda/R2/USEPA/US@EPA)

06/12/2009 08:50

cc

AM

Subject

NEW ISSUE #29 | Case 38606 | Lab  
A4 | Issue Discrepancies with  
tags, jars, and/or TR/COC

Adly,

A4 is reporting the following issue regarding Case 38606.

Issue: There are DM samples listed on the TR/COC for dissolved metals analysis; however, there are no dissolved metals samples scheduled for this Case.

Please advise on how the laboratory should proceed.

000145  
12/13-8  
6/15/2009

Thanks,

Kristin E. Von Moll  
Environmental Coordinator - Regions 2 & 7 CSC

15000 Conference Center Drive, Chantilly, VA 20151 Civil Division | (p)  
703-818-4235 | (f) 703-818-4602 | [kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

---

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

---

From: [jschulze@a4scientific.com](mailto:jschulze@a4scientific.com) [mailto:[jschulze@a4scientific.com](mailto:jschulze@a4scientific.com)]  
Sent: Thursday, June 11, 2009 9:16 PM  
To: Von Moll, Kristin  
Cc: Laxmi; pakanati; sri  
Subject: Re: Case 38606 | shipping

Kristin,

Lab did receive the attached samples and the TR/COC does listed Dissolved Metals.

----- Original Message -----

From: Von Moll, Kristin  
To: Jessica Schulze ; Laxmi Teerupalli ; Rabina Shreshta ; Reddy Pakanati ; Shreedhar Vokati  
Sent: Wednesday, June 10, 2009 2:30 PM  
Subject: Case 38606 | shipping

I believe that 4-6 water samples are shipping today under airbill 8693  
2864 6405. Can you please send me the TR/COCs when they are received?

The shipping information listed dissolved metals; however, this Case is not scheduled for dissolved metals.

Thanks,

Kristin E. Von Moll  
Environmental Coordinator - Regions 2 & 7 CSC

15000 Conference Center Drive, Chantilly, VA 20151 Civil Division |  
(p) 703-818-4235 | (f) 703-818-4602 | [kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

---

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

over 146  
107-83  
6/15/2009

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TX9

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9

Matrix (soil/water): WATER Lab Sample ID: 0010411-01

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U		P
7440-39-3	Barium	100	U	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	5.0	U	N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	5.0	U		P
7439-96-5	Manganese	7.5	U	N	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	30.0	U	N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

0000000019

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TY0

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9

Matrix (soil/water): WATER Lab Sample ID: 0010411-02

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	12.6			P
7440-39-3	Barium	384		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	0.91	J	N	P
7440-47-3	Chromium	37.3		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	37.1		N	P
7439-92-1	Lead	135			P
7439-96-5	Manganese	681		N	P
7440-02-0	Nickel	32.7		N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	10.8	J	N	P
7440-66-6	Zinc	255		N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000020

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TY1

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9  
 Matrix (soil/water): WATER Lab Sample ID: 0010411-03  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	6.1			P
7440-39-3	Barium	200		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	6.1		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	11.3	J	N	P
7439-92-1	Lead	3.6	J		P
7439-96-5	Manganese	441		N	P
7440-02-0	Nickel	38.0		N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	124		N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

000000021

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TY2

Lab Name: A4 Scientific, Inc.Contract: EPW08063Lab Code: A4 Case No.: 38606NRAS No.: 1772.0SDG NO.: MB4TX9Matrix (soil/water): WATERLab Sample ID: 0010411-04Level (low/med): LOWDate Received: 06/25/2009Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	14.7			P
7440-39-3	Barium	935		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	1.1	J	N	P
7440-47-3	Chromium	38.6		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	29.1		N	P
7439-92-1	Lead	143			P
7439-96-5	Manganese	1160		N	P
7440-02-0	Nickel	32.7		N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	31.9		N	P
7440-66-6	Zinc	188		N	P

Color Before: YELLOWClarity Before: CLOUDY

Texture: \_\_\_\_\_

Color After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

0000000022



## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TY4

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9

Matrix (soil/water): WATER Lab Sample ID: 0010411-05

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U		P
7440-39-3	Barium	100	U	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	5.0	U	N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	5.0	U		P
7439-96-5	Manganese	7.5	U	N	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	30.0	U	N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000023

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TY5

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9  
Matrix (soil/water): WATER Lab Sample ID: 0010411-06  
Level (low/med): LOW Date Received: 06/25/2009  
% Solids: 0.0  
Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.1			P
7440-39-3	Barium	487		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	7.2		N	P
7440-48-4	Cobalt	11.0	J	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	<del>13.7</del>		R	P
7439-96-5	Manganese	4520		N	P
7440-02-0	Nickel	12.0	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	55.5		N	P
7440-66-6	Zinc	19.0	J	N	P

Color Before: YELLOW Clarity Before: CLOUDY Texture: \_\_\_\_\_  
Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

000000024

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TY6

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9  
Matrix (soil/water): WATER Lab Sample ID: 0010411-07  
Level (low/med): LOW Date Received: 06/25/2009  
% Solids: 0.0  
Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	7.1			P
7440-39-3	Barium	487		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	10.0		N	P
7440-48-4	Cobalt	10.7	J	N	P
7440-50-8	Copper	6.2	J	N	P
7439-92-1	Lead	52.3			P
7439-96-5	Manganese	4420		N	P
7440-02-0	Nickel	13.5	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	56.7		N	P
7440-66-6	Zinc	38.9		N	P

Color Before: YELLOW Clarity Before: CLOUDY Texture: \_\_\_\_\_  
Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

0000000025

**USEPA-CLP**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

MB4TY7

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9  
 Matrix (soil/water): WATER Lab Sample ID: 0010411-08  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	109			P
7440-39-3	Barium	227		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.9		N	P
7440-47-3	Chromium	47.9		N	P
7440-48-4	Cobalt	9.8	J	N	P
7440-50-8	Copper	359		N	P
7439-92-1	Lead	353			P
7439-96-5	Manganese	787		N	P
7440-02-0	Nickel	171		N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	85.9		N	P
7440-66-6	Zinc	283		N	P

Color Before: YELLOW Clarity Before: CLOUDY Texture: \_\_\_\_\_  
 Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

0000000026

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TZ0

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
 Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9  
 Matrix (soil/water): WATER Lab Sample ID: 0010494-01  
 Level (low/med): LOW Date Received: 06/25/2009  
 % Solids: 0.0  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	11.5	J	N	P
7440-38-2	Arsenic	14.8			P
7440-39-3	Barium	244		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	33.4		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	9.8	J	N	P
7439-92-1	Lead	25.6			P
7439-96-5	Manganese	95.5		N	P
7440-02-0	Nickel	23.5		N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	43.7		N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

000000027

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TZ2

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9  
Matrix (soil/water): WATER Lab Sample ID: 0010494-02  
Level (low/med): LOW Date Received: 06/25/2009  
% Solids: 0.0  
Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	25.3			P
7440-39-3	Barium	250		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	1.8	J	N	P
7440-47-3	Chromium	21.6		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	46.6		N	P
7439-92-1	Lead	98.3			P
7439-96-5	Manganese	366		N	P
7440-02-0	Nickel	19.8	J	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	17.8	J	N	P
7440-66-6	Zinc	170		N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_  
Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

000000028

**USEPA-CLP**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

MB4TZ3

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9

Matrix (soil/water): WATER Lab Sample ID: 0010494-03

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	4.5	J		P
7440-39-3	Barium	102		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	4.1	J	N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	5.1	J	N	P
7439-92-1	Lead	7.2			P
7439-96-5	Manganese	626		N	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	23.1	J	N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

0000000029

**USEPA-CLP**  
**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

MB4TZ4

Lab Name: A4 Scientific, Inc. Contract: EPW08063

Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9

Matrix (soil/water): WATER Lab Sample ID: 0010494-04

Level (low/med): LOW Date Received: 06/25/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	3.0	J		P
7440-39-3	Barium	98.2	J	N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	3.6	J	N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	4.7	J	N	P
7439-92-1	Lead	6.2			P
7439-96-5	Manganese	604		N	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	19.8	J	N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

000000030



USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TZ5

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9  
Matrix (soil/water): WATER Lab Sample ID: 0010492-01  
Level (low/med): LOW Date Received: 06/25/2009  
% Solids: 0.0  
Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U		P
7440-39-3	Barium	552		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	3.9	J	N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	12.5	U	N	P
7439-92-1	Lead	11.3			P
7439-96-5	Manganese	2030		N	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	30.0	U	N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_  
Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

0000000031

## USEPA-CLP

1A-IN

## INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TZ6

Lab Name: A4 Scientific, Inc.Contract: EPW08063Lab Code: A4 Case No.: 38606NRAS No.: 1772.0SDG NO.: MB4TX9Matrix (soil/water): WATERLab Sample ID: 0010492-02Level (low/med): LOWDate Received: 06/25/2009% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	10.4	J	N	P
7440-38-2	Arsenic	24.3			P
7440-39-3	Barium	185		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	6.5		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	5.4	J	N	P
7439-92-1	Lead	27.8			P
7439-96-5	Manganese	1000		N	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	16.7		N	P
7440-62-2	Vanadium	25.0	U	N	P
7440-66-6	Zinc	49.4		N	P

Color Before: COLORLESSClarity Before: CLOUDY

Texture: \_\_\_\_\_

Color After: YELLOWClarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

0000000032

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TZ7

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9  
Matrix (soil/water): WATER Lab Sample ID: 0010492-03  
Level (low/med): LOW Date Received: 06/25/2009  
% Solids: 0.0  
Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	5.0	U		P
7440-39-3	Barium	266		N	P
7440-41-7	Beryllium	2.5	U	N	P
7440-43-9	Cadmium	2.5	U	N	P
7440-47-3	Chromium	21.3		N	P
7440-48-4	Cobalt	25.0	U	N	P
7440-50-8	Copper	17.1		N	P
7439-92-1	Lead	22.1			P
7439-96-5	Manganese	534		N	P
7440-02-0	Nickel	20.0	U	N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	15.5	J	N	P
7440-66-6	Zinc	110		N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_  
Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

000000033

USEPA-CLP  
1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB4TZ9

Lab Name: A4 Scientific, Inc. Contract: EPW08063  
Lab Code: A4 Case No.: 38606 NRAS No.: 1772.0 SDG NO.: MB4TX9  
Matrix (soil/water): WATER Lab Sample ID: 0010492-04  
Level (low/med): LOW Date Received: 06/25/2009  
% Solids: 0.0  
Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	30.0	U	N	P
7440-38-2	Arsenic	25.7			P
7440-39-3	Barium	151		N	P
7440-41-7	Beryllium	0.67	J	N	P
7440-43-9	Cadmium	6.0		N	P
7440-47-3	Chromium	116		N	P
7440-48-4	Cobalt	11.1	J	N	P
7440-50-8	Copper	431		N	P
7439-92-1	Lead	464			P
7439-96-5	Manganese	430		N	P
7440-02-0	Nickel	76.0		N	P
7782-49-2	Selenium	17.5	U	N	P
7440-22-4	Silver	5.0	U	N	P
7440-28-0	Thallium	12.5	U	N	P
7440-62-2	Vanadium	57.8		N	P
7440-66-6	Zinc	1200		N	P

Color Before: COLORLESS Clarity Before: CLOUDY Texture: \_\_\_\_\_  
Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

0000000034

JUL 14 2009

## A4 SCIENTIFIC, INC.

1544 Sawdust Road, Suite 505 • The Woodlands, TX 77380 • Phone (281) 292-5277

HAZ WASTE SUPPORT SEC.

Contract #: EPW06057

Case #: 38606

SDG #: MB4TX9

**SDG NARRATIVE****SAMPLE RECEIPT & LOGIN**

The following samples were received on the dates listed against them. The samples were logged in for analysis as listed.

<u>Client Sample</u>	<u>Lab Sample</u>	<u>Matrix</u>	<u>#Cont.</u>	<u>Received</u>	<u>Analysis</u>	<u>Comments</u>
MB4TX9	0010411-01	Water	2	06/25/09 10:50	ILM05.4-TOTAL ICPAES	FIELD QC-MA 1772.0
MB4TY0	0010411-02	Water	2	06/25/09 10:50	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TY1	0010411-03	Water	1	06/25/09 10:50	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TY2	0010411-04	Water	1	06/25/09 10:50	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TY4	0010411-05	Water	2	06/25/09 10:50	ILM05.4-TOTAL ICPAES	FIELD QC-MA 1772.0
MB4TY5	0010411-06	Water	2	06/25/09 10:50	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TY6	0010411-07	Water	2	06/25/09 10:50	ILM05.4-TOTAL ICPAES	FIELD QC-MA 1772.0
MB4TY7	0010411-08	Water	4	06/25/09 10:50	ILM05.4-TOTAL ICPAES	MS/DUP-MA 1772.0
MB4TZ5	0010492-01	Water	1	06/25/09 10:07	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TZ6	0010492-02	Water	1	06/25/09 10:07	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TZ7	0010492-03	Water	1	06/25/09 10:07	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TZ9	0010492-04	Water	1	06/25/09 10:07	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TZ0	0010494-01	Water	1	06/25/09 09:36	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TZ2	0010494-02	Water	1	06/25/09 09:36	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TZ3	0010494-03	Water	1	06/25/09 09:36	ILM05.4-TOTAL ICPAES	MA 1772.0
MB4TZ4	0010494-04	Water	1	06/25/09 09:36	ILM05.4-TOTAL ICPAES	MA 1772.0

Samples were received in the following coolers.

DATE RECEIVED	COOLER NO.	Temp (in °C)	AIRBILL NO.
06/05/2009	1	6	869657614529
06/06/2009	1	7	869328646493
06/11/2009	1	5	869328646405
06/13/2009	1	6	869328646324

Issue: The laboratory did not receive a TR/COC with the following samples that were received on 6/13:

MB4TZ5

MB4TZ6

MB4TZ7

MB4TZ9

000000002

# A4 SCIENTIFIC, INC.

1544 Sawdust Road, Suite 505 • The Woodlands, TX 77380 • Phone (281) 292-5277

Contract #: EPW06057

Case #: 38606

SDG #: MB4TX9

## SDG NARRATIVE

Resolution: Per Region 2, the TR/COC for these samples will be forwarded to the laboratory and the issue should be noted in the SDG Narrative.

No other discrepancies or issues were noted during receipt and login.

### ICP-AES

All samples were analyzed under MA 1772.0 (ICP-AES Analysis with a 2x Concentrated Preparation).

Water samples were digested by Hot-Block technique (HW1) and analyzed using a Thermo Electron ICAP6500.

DUP and MS were performed on sample "MB4TY7" they were within the QC limits.

The Serial Dilution was performed on sample "MB4TY7" and they were within the QC limits.

No problems were encountered during sample preparation or analysis.

All samples were prepared and analyzed within the contractual holding times.

pH of the water samples was verified upon sample receipt and pH log book page is included in the data package.

### ICP-AES

#### Water Samples:

$$\text{Concentration } (\mu\text{g/L}) = C * \frac{V_f}{V_i} * DF$$

Where,

C = Instrument value in  $\mu\text{g/L}$

$V_f$  = Final digestion volume (mL) (50ml)

$V_i$  = Initial digestion volume (mL) (50ml)

DF = Dilution Factor

000000003

**jschulze@a4scientific.com**

---

**From:** "Von Moll, Kristin" <kvonmoll@fedcsc.com>  
**To:** "Jessica Schulze" <jschulze@a4scientific.com>; "Laxmi Teerupalli" <laxmi@a4scientific.com>; "Rabina Shreshta" <rabina@a4scientific.com>; "Reddy Pakanati" <pakanati@a4scientific.com>; "Shreedhar Vokat" <shreedhar@a4scientific.com>  
**Cc:** "Adly Michael" <Michael.Adly@epamail.epa.gov>; "Jennifer Ferranda" <feranda.jennifer@epa.gov>  
**Sent:** Friday, June 12, 2009 8:30 AM  
**Attach:** 38606.pdf  
**Subject:** Region 02 | Case 38606 | Lab A4 | Issue Discrepancies with tags, jars, and/or TR/COC | FINAL

Jessica,

**\*\*\*Summary Start\*\*\***

**Issue:** There are DM samples listed on the TR/COC for dissolved metals analysis; however, there are no dissolved metals samples scheduled for this Case.

**Resolution:** Per Region 2, the two dissolved metals samples will be scheduled and the issue should be noted in the SDG Narrative. The samples require filtered analysis by ICP-AES (Al, Ca, Fe, Mg, K, Na), Hg and ICP-MS TM.

**\*\*\*Summary End\*\*\***

Please let me know if you have any questions.

Thanks,

Kristin E. Von Moll  
 Environmental Coordinator - Regions 2 & 7  
 CSC

15000 Conference Center Drive, Chantilly, VA 20151  
 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 | [kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

-----  
 This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.  
 -----

-----Original Message-----

**From:** [Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov) [mailto:[Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov)]  
**Sent:** Friday, June 12, 2009 9:50 AM  
**To:** Von Moll, Kristin  
**Cc:** [feranda.jennifer@epa.gov](mailto:feranda.jennifer@epa.gov)  
**Subject:** Re: NEW ISSUE #29 | Case 38606 | Lab A4 | Issue Discrepancies with tags, jars, and/or TR/COC

Kristin,

The additional samples for dissolved Metals are only two samples. If those two samples have been received, that is it, no more. those two samples should be analyzed similar to the others for TM, i.e. by ICP-AES for select Metals and Hg, and by ICP-MS for the whole list of 16 analytes/Metals.

If you have any further questions, please e-mail or call.

000000238

Thanks for your help with this issue.

Adly A. Michael  
US EPA - Region 2  
HWSB - HWSS  
Phone: (732) 906-6161  
Fax: (732) 321-6622

"Von Moll,  
Kristin"

<[kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com)>

To

Adly [Michael/R2/USEPA/US@EPA](mailto:Michael/R2/USEPA/US@EPA),  
Jennifer [Feranda/R2/USEPA/US@EPA](mailto:Feranda/R2/USEPA/US@EPA)

06/12/2009 09:23  
AM

cc

Subject

NEW ISSUE #29 | Case 38606 | Lab  
A4 | Issue Discrepancies with  
tags, jars, and/or TR/COC

Adly,

Can you please clarify, are you saying that two additional dissolved metals samples are expected to ship on top of the two that have already shipped? Can you also please confirm the analysis for these dissolved metals? The total metals are scheduled for the AES select metals and Hg as well as MS total metals.

Please let me know if you have any questions.  
Thanks,

~~Kristin E. Von Moll~~  
Environmental Coordinator - Regions 2 & 7 CSC

15000 Conference Center Drive, Chantilly, VA 20151 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 |  
[kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

---

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

---

000000239

-----Original Message-----



From: [Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov) [mailto:[Michael.Adly@epamail.epa.gov](mailto:Michael.Adly@epamail.epa.gov)]

Sent: Friday, June 12, 2009 9:18 AM

To: Von Moll, Kristin

Cc: [feranda.jennifer@epa.gov](mailto:feranda.jennifer@epa.gov)

Subject: Re: NEW ISSUE #29 | Case 38606 | Lab A4 | Issue Discrepancies with tags, jars, and/or TR/COC

Kristin,

Please advise the lab of two (2) additional water samples for Dissolved Metals analysis. Also, samples will be shipped today for Saturday (tomorrow) delivery, and with that shipment the case will be complete.

Thanks.

Adly A. Michael  
US EPA - Region 2  
HWSB - HWSS  
Phone: (732) 906-6161  
Fax: (732) 321-6622

"Von Moll,  
Kristin"

<[kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com)>

To

Adly [Michael/R2/USEPA/US@EPA](mailto:Michael/R2/USEPA/US@EPA),  
Jennifer [Feranda/R2/USEPA/US@EPA](mailto:Feranda/R2/USEPA/US@EPA)

06/12/2009 08:50  
AM

cc

Subject

NEW ISSUE #29 | Case 38606 | Lab  
A4 | Issue Discrepancies with  
tags, jars, and/or TR/COC

Adly,

A4 is reporting the following issue regarding Case 38606.

Issue: There are DM samples listed on the TR/COC for dissolved metals analysis; however, there are no dissolved metals samples scheduled for this Case.

000000240

Please advise on how the laboratory should proceed.

Thanks,

Kristin E. Von Moll  
Environmental Coordinator - Regions 2 & 7 CSC

15000 Conference Center Drive, Chantilly, VA 20151 Civil Division | (p)  
703-818-4235 | (f) 703-818-4602 | [kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

---

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

---

From: [jschulze@a4scientific.com](mailto:jschulze@a4scientific.com) [mailto:[jschulze@a4scientific.com](mailto:jschulze@a4scientific.com)]  
Sent: Thursday, June 11, 2009 9:16 PM  
To: Von Moll, Kristin  
Cc: Laxmi; pakanati; sri  
Subject: Re: Case 38606 | shipping

Kristin,

Lab did receive the attached samples and the TR/COC does listed Dissolved Metals.

----- Original Message -----

From: Von Moll, Kristin  
To: Jessica Schulze ; Laxmi Teerupalli ; Rabina Shreshta ; Reddy Pakanati ; Shreedhar Vokati  
Sent: Wednesday, June 10, 2009 2:30 PM  
Subject: Case 38606 | shipping

I believe that 4-6 water samples are shipping today under airbill 8693  
2864 6405. Can you please send me the TR/COCs when they are received?

The shipping information listed dissolved metals; however, this Case is not scheduled for dissolved metals.

Thanks,

Kristin E. Von Moll  
Environmental Coordinator - Regions 2 & 7 CSC

15000 Conference Center Drive, Chantilly, VA 20151 Civil Division |  
(p) 703-818-4235 | (f) 703-818-4602 | [kvonmoll@fedcsc.com](mailto:kvonmoll@fedcsc.com) | [www.csc.com](http://www.csc.com)

---

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

000000241

---

(See attached file: 38606.pdf)  
(See attached file: 38606.pdf)

000000242

**Saroj Parikh**

**From:** "Von Moll, Kristin" <kvonmoll@fedcsc.com>  
**To:** "Kerry Hinshaw" <khinshaw@shealylab.com>; "Michael Woodrum" <mwoodrum@shealylab.com>; "Saroj A. Parikh" <sparikh@shealylab.com>  
**Cc:** "Adly Michael" <Michael.Adly@epamail.epa.gov>; "Jennifer Ferranda" <feranda.jennifer@epa.gov>  
**Sent:** Friday, June 05, 2009 2:15 PM  
**Attach:** Case 38606\_TR\_06042009.pdf; Case 38606\_TR\_06042009\_For A4 Scientific.pdf  
**Subject:** Region 02 | Case 38606 | Lab SHEALY | Issue Samples shipped to incorrect laboratory | FINAL

Saroj,

Record of Communication Update-  
 his ROC has been updated to indicate that the lab should ship the samples for overnight Saturday delivery and that they should ice the samples.

**\*\*Summary Start\*\***

Issue: The laboratory received four inorganic samples on the attached TR/COC that should have been shipped to A4. They also received the organic samples that they were supposed to receive.

Resolution: Per Region 2, the laboratory should ice the samples and transship them to A4 for overnight Saturday delivery using the following information:

A4 Scientific, Inc.  
 544 Sawdust Rd., Suite 505  
 The Woodlands, TX 77380  
 Phone: 281-292-5277  
 FedEx account #: 1520-5888-8

**\*\*Summary End\*\***

Please let me know if you have any questions.  
 Thanks,

Kristin E. Von Moll  
 Environmental Coordinator - Regions 2 & 7  
 CSC

5000 Conference Center Drive, Chantilly, VA 20151  
 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 | kvonmoll@fedcsc.com | www.csc.com

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

5/5/2009 1:47 PM Phone conversation between Adly Michael, Region 2, and Kristin Von Moll, SMO. Adly told Kristin that the lab should ice the samples and ship them for overnight Saturday delivery.

5/5/2009 1:44 PM Phone conversation between Saroj Parikh, SHEALY, and Kristin Von Moll, SMO. Saroj asked if the lab should ice the samples before they are shipped and if they should ship them for overnight delivery.

**—Original Message—**

**From:** Von Moll, Kristin  
**Sent:** Friday, June 05, 2009 1:30 PM  
**To:** 'Kerry Hinshaw'; 'Michael Woodrum'; 'Saroj A. Parikh'  
**Cc:** 'Adly Michael'; 'Jennifer Ferranda'  
**Subject:** Region 02 | Case 38606 | Lab SHEALY | Issue Samples shipped to incorrect laboratory | FINAL

Saroj,

**\*\*Summary Start\*\***

Issue: The laboratory received four inorganic samples on the attached TR/COC that should have been shipped to A4. They also received the organic samples that they were supposed to receive.

Resolution: Per Region 2, the laboratory should transship the samples to A4 using the following information:

A4 Scientific, Inc.  
 544 Sawdust Rd., Suite 505  
 The Woodlands, TX 77380  
 Phone: 281-292-5277  
 FedEx account #: 1520-5888-8

**\*\*Summary End\*\***

Please let me know if you have any questions.  
 Thanks,

000000243

Kristin E. Von Moll  
Environmental Coordinator - Regions 2 & 7 CSC

5000 Conference Center Drive, Chantilly, VA 20151 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 | kvonmoll@fedcsc.com | www.csc.com

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

-----Original Message-----

From: Michael.Adly@epamail.epa.gov [mailto:Michael.Adly@epamail.epa.gov]  
Sent: Friday, June 05, 2009 1:22 PM  
To: Von Moll, Kristin  
Cc: feranda.jennifer@epa.gov  
Subject: Re: NEW ISSUE #17 | Case 38606 | Lab SHEALY | Issue Samples shipped to incorrect laboratory

Kristin,

Please ask SHEALY to ship the inorganic samples to A4 laboratory using the below FedEx account number:

FedEx account #: 1520-5888-8

Thanks.

Adly A. Michael  
US EPA - Region 2  
IWSB - HWSS  
Phone: (732) 906-6161  
Fax: (732) 321-6622

"Von Moll,  
Kristin"  
<kvonmoll@fedcsc.com>  
To  
Adly Michael/R2/USEPA/US@EPA,  
Jennifer Feranda/R2/USEPA/US@EPA  
06/05/2009 12:35 PM  
cc  
Subject  
NEW ISSUE #17 | Case 38606 | Lab  
SHEALY | Issue Samples shipped to  
incorrect laboratory

Adly,

SHEALY is reporting the following issue regarding Case 38606.

Issue: The laboratory received four inorganic samples on the attached TR/COC that should have been shipped to A4. They also received the organic samples that they were supposed to receive.

Please advise on how the laboratory should proceed.  
Thanks,

Kristin E. Von Moll  
Environmental Coordinator - Regions 2 & 7 CSC

5000 Conference Center Drive, Chantilly, VA 20151 Civil Division | (p) 703-818-4235 | (f) 703-818-4602 | kvonmoll@fedcsc.com | www.csc.com

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

000000244

From: Saroj Parikh [mailto:sparikh@shealylab.com]  
Sent: Friday, June 05, 2009 11:55 AM  
To: Von Moll, Kristin  
Cc: Kerry Hinshaw; Saroj Parikh; Michael A. Woodrum  
Subject: Case 38606 - Four ICP AES/MS samples sent to our lab, rather than A4 Scientific

Kristin,

Case 38606: We received samples for this Case in three (3) coolers this morning (06/05/09). Please see attached TR/COCs.

ICP AES/MS Samples for A4 Scientific: We received four (4) ICP AES/MS samples. As per TR/COCs, these samples are supposed to be for A4 Scientific, Inc., The Woodlands, TX., but inadvertently they have been sent to our lab. We are not scheduled for any ICP AES/MS samples for this Case. We have not logged in or scheduled these samples for ICP AES/MS analysis. Please let us know what you want us to do with these samples.

We also received three (3) aqueous samples for BNA, PEST, and ARO fractions and sixteen (16) aqueous samples for TVOA analysis this morning. These samples are being logged in.

Thanks,

Saroj A. Parikh  
Project Manager  
Shealy Environmental Services, Inc.  
www.shealylab.com  
Tel.: 803-791-9700, ext. 147  
sparikh@shealylab.com

CONFIDENTIALITY NOTICE: This e-mail and any attachments may contain privileged or confidential information and is protected by Federal law. If you are not the intended recipient, you are hereby notified that any distribution or copying of this communication is strictly prohibited. Please delete this message and any attachments from your computer without retaining any copies. If you have received this communication in error, please reply to the sender immediately. We appreciate your cooperation. (See attached file: Case 38606\_TR\_06042009.pdf)(See attached file: Case 38606\_TR\_06042009\_For A4 Scientific.pdf)

000000245

06/05/09

Standard Operating Procedure  
USEPA Region 2  
Evaluation of Metals Data for the Contract Laboratory Program  
Data Assessment and Contract Compliance Review

SOP: HW-2 Revision 13

Appendix A.2

Sept. 2005

---

---

**Inorganic Data Review Narrative**

Case# 38606	Site: DIAMOND HEAD	Soil: 0
SDG# MB4TT7, MB4TX9, MB4TY9	Lab: A4 SCIENTIFIC	Water: 37
Sampling Team: CH2M	Reviewer: C. STANCA	Other: 0

**A.2.1 Data Validation Flags:**

The following flags may have been applied in red by the data validator and must be considered by the data user.

J - This flag indicates the result qualified as estimated

R and Red-Line - A red-line drawn through a sample result indicates unusable value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

U - This data validation qualifier is applied to sample results  $\geq$  MDL when associated blank is contaminated

Fully Usable Data - The results that do not carry "J" or "red-line" are fully usable.

**A.2.2 Laboratory Qualifiers:**

The CLP laboratory applies a contractual qualifier on all Form I'S and the QC Form when a QC analysis is outside the control limits. These qualifiers are not applied on the Lotus or XLS spreadsheets. These qualifiers and their meanings are as follows:

N: This qualifier indicates the lack of accuracy in the reported result, and is applied when matrix spiked sample recovery is outside the control limits.

E: This qualifier indicates the presence of interference, and is applied when the ICP serial dilution is outside the control limits.

\*: This qualifier indicates the lack of precision, and is applied on Form I'S and Form VI when the Lab Duplicate analysis is outside the control limits.

U: This is a concentration qualifier that laboratory applies to a non-detected result which is essentially less than the Method Detection Limit (MDL). A non-detected result of an analyte is indicated by the Contract Required Quantitation Limit (CRQL) of that analyte suffixed with "U".

J: This is also a concentration qualifier that laboratory applies to a positive result below the CRQL.

**NOTE:** The laboratory qualifiers are crossed out and replaced with the appropriate data validation qualifiers (J, R or U) by the data validator.

1

**Standard Operating Procedure**  
**USEPA Region 2**  
**Evaluation of Metals Data for the Contract Laboratory Program**  
**Data Assessment and Contract Compliance Review**

SOP: HW-2    Revision 13

Appendix A.2

Sept. 2005

---

**A.2.3.1    Data Case Description:**

This case consists of thirty-seven (37) aqueous samples collected at the Diamond Head site between 5/27/09 and 6/12/09 for TAL Metals analysis according to the USEPA CLP SOW No. ILM05.4. Samples MB4TW2/MB4TW3, MB4TY5/MB4TY6, and MB4TZ3/MB4TZ4 were the field duplicate pairs for this sampling event. Matrix spike, laboratory duplicate and serial dilution analyses were performed on samples MB4TW4, MB4TY7, and MB4TY8. Samples MB4TW0, MB4TX9, and MB4TY4 were identified as field blanks.

As per EPA Technical Direction Form (TDF) only the following criteria were reviewed by the data validator: Preservation, Holding Time, CRQL Standard, Matrix Spike (soil matrix), ICS, Laboratory Duplicate, Field Duplicate, ICP Serial Dilution. The qualifiers applied on Form Is and CADRE EXCEL spreadsheets are based on ESAT data review of the above mentioned criteria. For all other criteria see the attached CADRE Reports.

**A.2.3.2    CSF Audit: No problems.**

**A.2.3.3    Technical Review:**

SDG MB4TT7 (WATER, ICP-AES, MA 1772.0)

ICB/CCB

The Calibration Blanks values were  $\geq$ MDL but  $\leq$ CRQL for Sb. (Only analytes that required qualifications were mentioned.) The following associated positive results  $\leq$ CRQL were raised to the CRQL and qualified "U".

"U" -> Sb -> MB4TW7

ICP SERIAL DILUTION

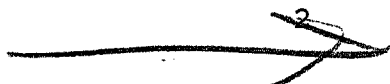
The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 50 X MDL for Mn (%D = 45). All associated sample results greater than MDL have been considered estimated and flagged "J".

"J" -> Mn -> MB4TT7 - MB4TT9, MB4TW2 - MB4TW4, MB4TW7 - MB4TW9

FIELD DUPLICATE

The absolute difference between sample and duplicate results was greater than 2X CRQL for Cr and Pb when sample and/or duplicate results were less than 5 X CRQL. All associated sample results  $\leq$ 5XCRQL have been considered rejected and flagged "R".

"R" -> Cr, Pb -> MB4TW3





Standard Operating Procedure  
USEPA Region 2  
Evaluation of Metals Data for the Contract Laboratory Program  
Data Assessment and Contract Compliance Review

SOP: HW-2    Revision 13

Appendix A.2

Sept. 2005

SDG MB4TX9 (WATER, ICP-AES, MA 1772.0)

**FIELD DUPLICATE**

The absolute difference between sample and duplicate results was greater than 2X CRQL for Pb when sample and/or duplicate results were less than 5 X CRQL. All associated sample results  $\leq 5 \times \text{CRQL}$  have been considered rejected and flagged "R".

"R" -> Pb -> MB4TY5

SDG MB4TY9 (WATER, ICP-AES, MA 1772.0)

All QC criteria have been satisfied and the data are assessed to be acceptable and fully usable without qualifications.

**A.2.3.4    Contract-Problem/Non-Compliance:**

All SDGs:

All percent recoveries for matrix spike and LCS in all three SDGs were out of the acceptable range. The laboratory omitted the 2X concentration factor when reported the spiked sample values and Found values, respectively, as required by MA 1772.0. Re-submittals were requested and received on 8/10/09. The re-submitted forms showed all recoveries within the acceptable range.

HWSS Reviewer:

HS  
Signature

Date:

8/12/09

Contractor  
Reviewer:

Constantin Stancu  
Signature

Date:

8/12/09

Verified by:

\_\_\_\_\_  
Signature

Date: \_\_\_\_\_